In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1 1.   (Currently Amended) A server for a merchant computer system,
2 the server comprising:
3   a file store configured to store a range of audio/video
4 products in respective product files and client history data, the
5 client history data ~~including~~ includes a personal client file for
6 individually identified clients ~~storing~~ and stores past purchasing
7 records of the client;
8   a dialogue unit operable to invite and receive a client
9 selection from among the products, to identify a personal client
10 file corresponding to the client, and to define a degrade level
11 signal dependent upon the identified personal client file
12 containing client history data stored in the file store;
13   a product reader connected to read the product files from the
14 file store to generate a digital audio/video signal; and
15   a signal processing unit having an input selectively
16 connectable to receive the digital audio/video signal from the
17 product reader, a processing core operable to apply a defined level
18 of content degradation to the digital audio/video signal creating a
19 degraded digital audio/video signal having a degradation in
20 perceived quality corresponding to the defined degrade level signal
21 of the dialogue unit, and an output connected to output the
22 degraded digital audio/video signal.

Claims 2 to 34.   (Canceled)

1 35. (Currently Amended) A method of operating a server of a
2 merchant computer system, the method comprising:

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3   inviting a client to make a selection from a range of
4   audio/video products stored by the server in product files;
5   receiving a client selection for evaluation of one of the
6   products;
7   reading the selected product file to generate a digital
8   audio/video signal;
9   storing client history data, ~~including~~ the client history data
10 includes a personal client file for individually identified clients
11 ~~storing~~ and stores past purchasing records of the client;
12   identifying a personal client file corresponding to the
13 client;
14   defining a level of content degradation dependent on the
15 identified personal client file containing client history data;
16   applying the defined level of content degradation to the
17 digital audio/video signal to generate a degraded digital
18 audio/video signal having a degradation in perceived quality
19 corresponding to said defined level of content degradation; and
20   outputting the degraded digital audio/video signal to the
21 client.

Claim 36 and 37.   (Canceled)

1   38. (Original) A method according to claim 35, utilizing a digital
2   signal processor to apply the defined level of content degradation
3   to the digital data stream.

1   39. (Currently Amended) A method of communicating between a
2   client, server and gateway on a computer network, the method
3   comprising:
4   a)   the server storing client history data, ~~including~~ the
5   client history data includes a personal client file for

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6   individually identified clients ~~storing~~ and stores past purchasing
7   records of the client;
8   b)   the client establishing communication with the server to
9   identify the client and a client payment instrument to the server;
10   c)   the   server   identifying   a   personal   client   file
11   corresponding to the client;
12   d)   the   server   transmitting   to   the   client   a   range   of
13   audio/video products for supply in return for payment;
14   e)   the   client   transmitting   to   the   server   an   evaluation
15   request for one of the products;
16   f)   the server and gateway communicating to obtain payment
17   authorization   for   the   requested   product   from   the   payment
18   instrument;
19   g)   the server defining a level of content degradation as a
20   function of client history stored in the identified personal client
21   file;
22   h)   the   server   transmitting   to   the   client   a   degraded
23   evaluation   version   of   the   selected   product   without   payment
24   authorization, the degraded evaluation version of the selected
25   product having a degraded perceived quality corresponding to the
26   level of content degradation;
27   i)   the client transmitting to the server a payment decision;
28   j)   the server and gateway communicating to effect payment
29   capture for the authorized payment; and
30   k)   the server transmitting to the client a non-degraded
31   version of the selected product.

     Claims 40 and 41.   (Canceled)

1   42.   (Currently Amended) A server apparatus comprising:
2   means   for   supplying   a   range   of   audio/video   products   as
3   respective digital audio/video signals;

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4   means for storing client history data, ~~including~~ the client
5 history data includes a personal client file for individually
6 identified clients ~~storing~~ and stores past purchasing records of
7 the client;
8   means for inviting and receiving a client selection from among
9 the products via a network connection;
10   means for identifying a personal client file corresponding to
11 the client;
12   means for defining a level of content degradation as a
13 function of the identified personal client file;
14   means for processing the digital audio/video signal associated
15 with the selected product to apply the defined level of content
16 degradation thereto; and
17   means for outputting the degraded digital audio/video signal
18 to the network connection, the degraded digital audio/video signal
19 having a degraded perceived quality corresponding to the defined
20 level of content degradation, whereby a degraded version of the
21 selected product is supplied to the client.

1 43. (Currently Amended) A merchant computer system comprising a
2 server and a client interconnectable over a network, wherein the
3 server comprises:
4   a file store configured to store a range of audio/video
5 products in respective product files and client history data, the
6 client history data ~~including~~ includes a personal client file for
7 individually identified clients ~~storing~~ and stores past purchasing
8 records of the client;
9   a dialogue unit having a network connection and operable to
10 invite and receive a client selection from among the products via
11 the network connection, to identify a personal client file
12 corresponding to the client, and to define a level of content

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13   degradation dependent upon the personal client file containing
14   client history data stored in the file store;
15   a product reader connected to read the product files from the
16   file store to generate a digital audio/video signal; and
17   a signal processing unit having an input connectable to
18   receive the digital audio/video signal from the product reader, a
19   processing core operable to apply a defined level of content
20   degradation to the digital audio/video signal creating a degraded
21   digital audio/video signal having a degradation in perceived
22   quality corresponding to said defined level of content degradation
23   of the dialogue unit, and an output connected to output the
24   degraded digital audio/video signal from the processing core to the
25   network connection.

1   44   (Original) The system of claim 43, wherein the client
2   comprises an audio/video reproduction system operable to play the
3   audio/video product communicated by way of the digital audio/video
4   signal.

1   45.   (Original) The system of claim 43, the server further
2   including an output stage operatively arranged between the output
3   of the signal processing unit and the network connection, the
4   output stage having a packetizer for sub-dividing the degraded
5   digital audio/video signal into encrypted data packets and
6   associating decryption keys with each encrypted data packet, the
7   dialogue unit being operable to supply a packet decoder to the
8   client over the network for decoding the digital video/audio
9   signal, and wherein the client includes an input stage connected to
10   receive the packet decoder and load the packet decoder into a
11   decoder host, the client input stage further comprising an input
12   connected to receive the data packets and supply the data packets
13   to the decoder host for packetwise decoding by applying the packet

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14   decoder with the associated decryption key of the data packet

15   concerned, wherein the client input stage is configured to corrupt

16   the decryption key of any given data packet before the decoded data

17   of that packet is transmitted from the input stage in a form

18   playable by the reproduction system.

1   46.   (Currently Amended) A method of communicating between a

2   client, server and gateway on a computer network, the method

3   comprising:

4   a)   the server storing client history data, ~~including~~ the

5   client history data includes a personal client file for

6   individually identified clients ~~storing~~ and stores past purchasing

7   records of the client;

8   b)   the client establishing communication with the server to

9   identify the client;

10   c)   the server identifying a personal client file

11   corresponding to the client;

12   d)   the server transmitting to the client a range of

13   audio/video products for supply in return for payment;

14   e)   the client transmitting to the server an evaluation

15   request for one of the products;

16   f)   the server defining a level of content degradation as a

17   function of client history stored in the identified personal client

18   file;

19   g)   the server transmitting to the client a degraded

20   evaluation version of the selected product without payment

21   authorization, the degraded evaluation version of the selected

22   product having a degraded perceived quality corresponding to the

23   level of content degradation;

24   h)   performing steps d) through g) at least once;

25   i)   the client transmitting to the server a purchase decision

26   and payment instrument;

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27   j)   the server and gateway communicating to obtain payment
28   authorization   for   the   requested   product   from   the   payment
29   instrument;

30   k)   the server and gateway communicating to effect payment
31   capture for the authorized payment; and

32   l)   the server transmitting to the client a non-degraded
33   version of the selected product.

Claims 47 and 48.   (Canceled)

1   49.   (Previously Presented) The method of claim 35, wherein:
2   said step of applying a defined level of content degradation
3   includes inserting noise into the digital audio/video signal to
4   degrade signal quality.

1   50.   (Previously Presented) The method of claim 35, wherein:
2   said step of applying a defined level of content degradation
3   includes:
4   performing a discrete Fourier transform on the digital
5   audio/video signal to obtain a frequency domain representation
6   of the digital audio/video signal;
7   frequency modulating the frequency domain representation
8   of the digital audio/video signal; and
9   performing an inverse discrete Fourier transform unit on
10   the frequency modulated frequency domain representation of the
11   digital audio/video signal to reconstruct a time domain
12   representation of the digital audio/video signal;
13   wherein the frequency modulating effects a degradation of
14   perceived signal quality in the reconstructed digital audio/video
15   signal.

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1   51. (Previously Presented) The method of claim 50, wherein:

2   said step of frequency modulating includes one or more of the

3   following frequency band rejection, frequency low pass filtering

4   and frequency high pass filtering to effect a degradation of

5   perceived signal quality.

1   52. (Previously Presented) The method of claim 50, wherein:

2   said step of frequency modulating includes phase inversion

3   over at least one range of frequency components to degrade signal

4   quality.

1   53. (Previously Presented) The method of claim 50, wherein:

2   said digital audio/video signal includes a digital audio

3   signal; and

4   said step of frequency modulating includes inserting masked

5   sound contributions adjacent amplitude peaks of the frequency

6   domain representation of the digital audio signal to degrade signal

7   quality.

1   54. (Previously Presented) The method of claim 50, further

2   including the step of:

3   mixing a signal with the digital audio/video signal before

4   performing the discrete Fourier transform to effect a degradation

5   of perceived signal quality.

1   55. (Previously Presented) The method of claim 54, further

2   comprising:

3   frequency modulating the digital audio/video signal following

4   mixing and before the performing the inverse discrete Fourier

5   transform, the frequency modulating including band-pass filtering

6   to suppress frequency contributions lying outside a selected

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7   frequency range to effect a degradation of perceived signal

8   quality.

1   56.   (Previously Presented) The method of claim 55, wherein:

2   said frequency modulating includes inserting masked sound

3   contributions adjacent the mixing frequency to degrade signal

4   quality.

1   57.   (Previously Presented) The method of claim 35, wherein:

2   the digital audio/video signal includes a digital video

3   signal;

4   the method further comprising:

5   holding frames of the digital video signal in a frame buffer;

6   and

7   manipulating frames held in the frame buffer to generate a

8   degraded digital video signal.

1   58.   (Previously Presented) The method of claim 57, wherein:

2   the digital video signal consists of an MPEG standard video

3   signal including as frame types I-frames, P-frames and B-frames;

4   and

5   wherein said step of manipulating frames includes

6   identifying the frame type of frames held in the frame

7   buffer, and

8   performing frame manipulation of held frames according to

9   frame type so as to effect a degradation of perceived video

10   signal quality.

1   59.   (Previously Presented) The method of claim 57, wherein:

2   the digital video signal consists of an MPEG standard video

3   signal including data blocks, each comprising a plurality of

4   pixels; and

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5   wherein said step of manipulating frames includes varying the
6   pixels of the data blocks of at least selected ones of held frames
7   so as to effect a degradation of perceived video signal quality.

1   60.   (Previously Presented) The method of claim 57, wherein:
2   the digital video signal includes an MPEG standard video
3   signal including motion vectors; and
4   wherein said step of manipulating frames includes varying the
5   motion vectors of at least selected ones of the held frames so as
6   to effect a degradation of perceived video signal quality.

1   61.   (Previously Presented) The method of claim 57, wherein:
2   the digital video signal consists of an MPEG standard video
3   signal including objects; and
4   wherein said step of manipulating frames includes manipulating
5   the objects of at least selected ones of the held frames so as to
6   effect a degradation of perceived video signal quality.

1   62.   (Previously Presented) The method of claim 35, wherein:
2   said digital audio/video signal includes a multi-channel
3   digital audio signal; and
4   said step of applying the defined level of content degradation
5   includes switching individual channels within the multi-channel
6   digital audio signal to apply spatial modification to the digital
7   audio signal so as to effect a degradation of perceived digital
8   audio signal quality.

1   63.   (Previously Presented) The method of claim 35, wherein:
2   said digital audio/video signal includes a multi-channel
3   digital audio signal; and
4   said step of applying the defined level of content degradation
5   includes inverting the phase of at least one of the channel of the

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6   multi-channel digital audio signal so as to effect a degradation of

7   perceived digital audio signal quality.

1   64.   (Previously Presented) The method of claim 35, wherein:

2   said digital audio/video signal includes a multi-channel

3   digital audio signal; and

4   said step of applying the defined level of content degradation

5   includes adding together individual ones of the channels of the

6   multi-channel digital audio signal so as to effect a degradation of

7   perceived digital audio/video signal quality.

1   65.   (Previously Presented) The method of claim 35, wherein:

2   said digital audio/video signal includes a multi-channel

3   digital audio signal; and

4   said step of applying the defined level of content degradation

5   includes at least one of removing or attenuating of at least one of

6   the channels of the multi-channel audio signal so as to effect a

7   degradation of perceived digital audio/video signal quality.

1   66.   (Previously Presented) The method of claim 35, wherein:

2   the digital audio/video signal includes an n-bit digital audio

3   signal; and

4   said step of applying the defined level of content degradation

5   includes converting the n-bit digital audio signal into an m-bit

6   digital audio signal where m is less than n so as to effect a

7   degradation of perceived digital audio signal quality.

1   67.   (Previously Presented) The method of claim 35, wherein:

2   said step of applying the defined level of content degradation

3   includes time modulating the digital audio/video signal so as to

4   effect a degradation of perceived digital audio signal quality.

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1 68. (Previously Presented) The method of claim 67, wherein:

2   said step of time modulating the digital audio/video signal to

3 degrade signal quality includes at least one of:

4   speeding-up or slowing-down the digital audio/video

5   signal;

6   changing in the value of data bits in volume, luminance

7   or chrominance data contained within the digital audio/video

8   signal; and

9   lengthening of a sampling period of the digital

10   audio/video signal.

1 69. (Previously Presented) The method of claim 35, wherein:

2   said step of applying the defined level of content degradation

3 includes

4   converting the digital audio/video signal into an analog

5   audio/video signal,

6   analog processing the analog audio/video signal creating

7   a degraded analog audio/vided signal having a degradation in

8   perceived quality corresponding to said defined level of

9   content degradation, and

10   converting the degraded analog signal into a degraded

11   digital audio/video signal for output.

1 70. (Previously Presented) The method of claim 69, wherein:

2   the analog audio/video signal includes an analog audio signal;

3 and

4   said step of analog processing includes frequency domain

5 modulating the analog audio signal so as to effect a degradation of

6 perceived audio signal quality.

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1   71.   (Previously Presented) The method of claim 70, wherein:

2   said step of frequency domain modulating includes one or more

3   of band-reject filtering, low-pass filtering, high-pass filtering

4   and frequency-selective phase inversion to effect a degradation of

5   perceived audio signal quality.

1   72.   (Previously Presented) The method of claim 35, wherein:

2   said step of applying the defined level of content degradation

3   includes adding a secondary signal to the digital audio/video

4   signal so as to effect a degradation of perceived digital

5   audio/video signal quality.

1   73.   (Previously Presented) The method of claim 72, further

2   comprising:

3   generating said secondary signal to degrade signal quality.

1   74.   (Previously Presented) The method of claim 73, wherein:

2   said step of generating said secondary signal generates a

3   noise signal to degrade signal quality.

1   75.   (Previously Presented) The method of claim 73, wherein:

2   said step of generating said secondary signal generates a

3   content-based audio signal to degrade signal quality.

1   76.   (Previously Presented) The method of claim 35, wherein:

2   said step of adding a secondary signal to the digital

3   audio/video signal selects a level of the added secondary signal

4   determined by said level of content degradation to degrade signal

5   quality.

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1   77.   (Previously Presented) The server of claim 1, wherein:

2   the file store stores client history data whereby the personal

3   client file stores data indicative of a record of prior purchases

4   of audio/video products following output of a degraded digital

5   audio/video signal by said signal processing unit; and

6   said dialogue unit is further operable to define the degrade

7   level dependent upon the record of prior purchases of audio/video

8   products.

1   78.   (Previously Presented) The server of claim 77, wherein:

2   said dialogue unit is further operable to define the degrade

3   level at a first degrade level for clients whose record of prior

4   purchases of audio/video products following output of a degraded

5   digital audio/video signal by said signal processing unit is high,

6   at a second degrade level higher than the first degrade level for

7   clients whose record of prior purchases of audio/video products

8   following output of a degraded digital audio/video signal by said

9   signal processing unit is low, and at a third degrade level

10   intermediate between the first degrade level and the second degrade

11   level for new clients without a record of prior purchases.

1   79.   (Previously Presented) The method of claim 35, wherein:

2   the step of storing client history data stores client history

3   data whereby the personal client file stores data indicative of a

4   record of prior purchases of audio/video products following output

5   of a degraded digital audio/video signal by said signal processing

6   unit; and

7   said step of defining a level of content degradation defines

8   the degrade level dependent upon the record of prior purchases of

9   audio/video products.

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1 80.   (Previously Presented) The method of claim 79, wherein:

2   said step of defining a level of content degradation further

3 defines the degrade level at a first degrade level for clients

4 whose record of prior purchases of audio/video products following

5 output of a degraded digital audio/video signal by said signal

6 processing unit is high, at a second degrade level higher than the

7 first degrade level for clients whose record of prior purchases of

8 audio/video products following output of a degraded digital

9 audio/video signal by said signal processing unit is low, and at a

10 third degrade level intermediate between the first degrade level

11 and the second degrade level for new clients without a record of

12 prior purchases.

13 Claim 81. (Canceled)

1 82.   (Previously Presented) The method of claim 39, wherein:

2   the step of the server storing client history data stores

3 client history data whereby the personal client file stores data

4 indicative of a record of prior purchases of audio/video products

5 following output of a degraded digital audio/video signal by said

6 signal processing unit; and

7   said step of the server defining a level of content

8 degradation defines the degrade level dependent upon the record of

9 prior purchases of audio/video products.

1 83.   (Previously Presented) The method of claim 82, wherein:

2   said step of the server defining a level of content

3 degradation further defines the degrade level at a first degrade

4 level for clients whose record of prior purchases of audio/video

5 products following output of a degraded digital audio/video signal

6 by said signal processing unit is high, at a second degrade level

7 higher than the first degrade level for clients whose record of

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8   prior purchases of audio/video products following output of a

9   degraded digital audio/video signal by said signal processing unit

10 is low, and at a third degrade level intermediate between the first

11 degrade level and the second degrade level for new clients without

12 a record of prior purchases.

13 Claim 84. (Canceled)

1   85.   (Previously Presented) The server apparatus of claim 42,

2   wherein:

3   the means for storing client history data whereby the personal

4   client file stores data indicative of a record of prior purchases

5   of audio/video products following output of a degraded digital

6   audio/video signal to the network connection; and

7   the means for defining a level of content degradation defines

8   the degrade level dependent upon the record of prior purchases of

9   audio/video products.

1   86.   (Previously Presented) The server of claim 85, wherein:

2   means for defining a level of content degradation defines the

3   degrade level at a first degrade level for clients whose record of

4   prior purchases of audio/video products following output of a

5   degraded digital audio/video signal to the network connection is

6   high, at a second degrade level higher than the first degrade level

7   for clients whose record of prior purchases of audio/video products

8   following output of a degraded digital audio/video signal to the

9   network connection is low, and at a third degrade level

10 intermediate between the first degrade level and the second degrade

11 level for new clients without a record of prior purchases.

1   87.   (Previously Presented) The merchant computer system of claim

2   43, wherein:

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3   the file store stores client history data whereby the personal

4   client file stores data indicative of a record of prior purchases

5   of audio/video products following output of a degraded digital

6   audio/video signal by said signal processing unit; and

7   the dialogue unit is further operable to define the degrade

8   level dependent upon the record of prior purchases of audio/video

9   products.

1   88. (Previously Presented) The merchant computer system of claim

2   87, wherein:

3   said dialogue unit is further operable to define the degrade

4   level at a first degrade level for clients whose record of prior

5   purchases of audio/video products following output of a degraded

6   digital audio/video signal by said signal processing unit is high,

7   at a second degrade level higher than the first degrade level for

8   clients whose record of prior purchases of audio/video products

9   following output of a degraded digital audio/video signal by said

10 signal processing unit is low, and at a third degrade level

11 intermediate between the first degrade level and the second degrade

12 level for new clients without a record of prior purchases.

1   89. (Previously Presented) The method of claim 46, wherein:

2   the step of the server storing client history data stores

3   client history data whereby the personal client file stores data

4   indicative of a record of prior purchases of audio/video products

5   following output of a degraded digital audio/video signal by said

6   signal processing unit; and

7   said step of the server transmitting to the client a degraded

8   evaluation version of the selected product defines a degrade level

9   dependent upon the record of prior purchases of audio/video

10 products.

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1   90.   (Previously Presented) The method of claim 89, wherein:

2   said step of the server transmitting to the client a degraded

3   evaluation version of the selected product further defines the

4   degrade level at a first degrade level for clients whose record of

5   prior purchases of audio/video products following output of a

6   degraded digital audio/video signal by said signal processing unit

7   is high, at a second degrade level higher than the first degrade

8   level for clients whose record of prior purchases of audio/video

9   products following output of a degraded digital audio/video signal

10   by said signal processing unit is low, and at a third degrade level

11   intermediate between the first degrade level and the second degrade

12   level for new clients without a record of prior purchases.

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